

## ABSTRACT

A three dimensional ultrasound imaging device, having an interpolator that creates up sampled ultrasound image information from a three dimensional ultrasound image information using interpolation; and a memory that stores at least one of the three dimensional ultrasound image information and the up sampled ultrasound image information. The three dimensional ultrasound imaging device can have a probe that sends ultrasound waves, gathers reflected ultrasound waves and creates ultrasound information and a processor that converts the ultrasound information to three dimensional ultrasound image information. The ultrasound imaging device may also have a display that displays the up sampled image information. The three dimensional ultrasound imaging device may use at least one of 2 image to 3 image interpolation, 2 image to 4 image interpolation, 3 image to 4 image interpolation and 3 image to 5 image interpolation. The three dimensional ultrasound imaging device may use two dimensional solids and three dimensional volumes. The three dimensional ultrasound imaging device may also create up sampled ultrasound image information that has a greater number of frames, a greater number of three-dimensional frames, a greater number of two-dimensional volumes, a greater number of three dimensional volumes and a larger amount of ultrasound information.